

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A ~~parking management system~~ for managing parking using a parking meter including:

sensing means for sensing the presence of a vehicle in a parking position;

a housing module included in the parking meter having:

communication means for communicating with a network;

transaction means, in communication with the communication means and accessible to a user of the system, adapted to process data to effect a payment; and

processing means, in communication with the transaction means for monitoring the sensing means and for determining the payment for an overall time period during which the presence of the vehicle is sensed;

wherein the payment is determined according to a variable fee structure applicable to the overall time period and is effected at the end of the overall time period; and

wherein the variable fee structure includes fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected.

2. (Currently Amended) A parking management system according to claim 1, wherein the fee units ~~variable fee structure~~ includes a base charging rate and a variable

charging rate, the base charging rate being applicable to the ~~for a first parking time~~ period and, if the vehicle is sensed longer than the first ~~time parking~~ period, the variable charging rate being applicable to the ~~for a second time parking~~ period after the first ~~time parking~~ period.

3. (Currently Amended) A ~~parking management~~ system according to claim 2, wherein the overall time period is equal to the sum of the first and second ~~time parking~~ periods.

4. (Currently Amended) A ~~parking management~~ system according to claim 2 ~~or 3~~, wherein the base charging rate is constant over the first ~~time parking~~ period and the variable charging rate changes over the second ~~time parking~~ period.

5. (Currently Amended) A ~~parking management~~ system according to claim 4, wherein the variable charging rate increases over the second ~~time parking~~ period.

6. (Currently Amended) A ~~parking management~~ system according to claim 1, wherein the overall time period is the period of time between an initial receipt of payment information and receipt by the processing means of a user-actuated parking termination signal.

7. (Currently Amended) A ~~parking management~~ system according to claim 6, wherein the user-actuated parking termination signal is actuated by the user, either by providing a termination instruction to the processing means through the transaction means, or by moving the vehicle out of the parking position and thereby causing the sensing means to cease to detect the presence of the vehicle in the parking position.

8. (Currently Amended) A ~~parking management~~ system according to claim 6, wherein if the presence of the vehicle is sensed after a grace period before or after the overall time period, the processing means is adapted to communicate an infringement signal to an enforcement body over the network.

9. (Currently Amended) A ~~parking management~~ system according to claim 8, wherein a nil charging rate is applicable during the grace period.

10. (Currently Amended) A ~~parking management~~ system according to claim 1, wherein the sensing means is adapted to sense the presence of one or more vehicles in respective one or more parking positions.

11. (Currently Amended) A ~~parking management~~ system according to claim 10, wherein the sensing means includes at least one induction coil for each parking position.

12. (Currently Amended) A ~~parking management~~ system according to claim 1, wherein the housing further includes display means for displaying information to the user, in communication with the processing means.

13. (Currently Amended) A ~~parking management~~ system according to claim 12, wherein the transaction means includes card reading means for reading credit card information and manual input means for receiving an ~~authorisation~~ authorization code from the user.

14. (Currently Amended) A ~~parking management~~ system according to claim 13, wherein if the user inputs a special vehicle ~~authorisation~~ authorization code into the transaction means, a nil charging rate is applicable for at least a part of the overall time period.

15. (Currently Amended) A ~~parking management~~-system according to claim 12, wherein the transaction means includes cash payment means for receiving cash payment.

16. (Currently Amended) A ~~parking management~~-system according to claim 12, wherein the transaction means includes card reading means for reading stored-value card information and manual input means for receiving a payment ~~authorisation~~-authorization code from the user.

17. (Currently Amended) A ~~parking management~~-system according to claim 13, wherein the communication means is adapted to communicate with a financial institution for determining whether the authorisation code is valid and whether there is sufficient credit available to the user to effect the payment.

18. (Currently Amended) A ~~parking management~~-system according to claim 17, wherein the communication means is in communication with a central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means over the network.

19. (Currently Amended) A ~~parking management~~-system according to claim 1, wherein the processing means includes memory means.

20. (Currently Amended) A ~~parking management~~-system according to claim 19, wherein the system further includes a transportable programming device adapted to interface with the processing means for reconfiguring thereof and for reading and writing data from and to the memory means.

21. (Currently Amended) A ~~parking management~~-system according to claim 20, wherein the memory means includes further memory means for storing system

configuration data, the control station being adapted to selectively change the configuration data stored in the further memory means.

22. (Currently Amended) A ~~parking management~~-system according to claim 20, wherein the programming device is also adapted to interface with a data processing means of the central control station.

23. (Currently Amended) A ~~parking management~~-system according to claim 1, wherein the transaction means includes means for sensing when an access door to internal components of the housing has been opened.

24. (Currently Amended) A ~~parking management~~-system according to claim 19, wherein the system further includes diagnostic means for performing diagnostic inspection thereof.

25. (Currently Amended) A ~~parking management~~-system according to claim 24, wherein the diagnostic means of each parking meter includes fault-condition monitoring and counting means for fault monitoring and storing fault-related data.

26. (Currently Amended) A ~~parking management~~-system according to claim 25, wherein the diagnostic means is controlled by the processing means and is adapted to transmit the fault-related data to the control station through a communications network.

27. (Currently Amended) A ~~parking management~~-system according to claim 1, wherein the housing further includes printing means for printing a receipt for payment.

28. (Currently Amended) A parking meter, including:
sensing means for sensing the presence of a vehicle in a parking position;

a housing module having:

communication means for communicating with a network;

transaction means, in communication with the communication means and accessible to a user of the system, adapted to process data to effect a payment; and

processing means; in communication with the transaction means for monitoring the sensing means and for determining the payment for an overall time period during which the presence of the vehicle is sensed;

wherein the payment is determined according to a variable fee structure applicable to the overall time period and is effected at the end of the overall time period; and

wherein the variable fee structure includes fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected.

29. (Original) A parking management system including a plurality of parking meters according to claim 28.

30. (Original) A parking management system according to claim 29, wherein the communication means of each parking meter is in communication with a central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter over the network.

31. (Original) A parking management system according to claim 29, wherein each parking meter is in communication with one or more local controllers, each

of which is in communication with a central control station, the central control station being adapted to receive operational information and financial transaction information from the processing means of each parking meter via the one or more local controllers.

32. (Currently Amended) A method for effecting payment for parking using a parking meter, including the steps of:

monitoring a presence signal, representative of the presence or absence of a vehicle, from at least one parking bay associated with the parking meter;

receiving payment information from a user of said parking bay via the parking meter which enables a payment;

~~selecting at least one charging rate, of a plurality of charging rates, applicable over at least one respective charging period;~~

determining a length of time said vehicle is present in said at least one parking bay in response to the presence signal;

determining the payment based on ~~the selected said at least one charge rate applicable over the length of time~~ a variable fee structure that includes fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected; and

effecting the payment.

33. (Currently Amended) A method for managing a parking system, including the steps of:

sensing the presence or absence of a vehicle in a parking position;

selecting one or more fee charging rates from a plurality of fee ~~charging~~-rates applicable under one or more circumstances of use of the system;

receiving payment information relating to the payment of fees and ~~authorisation~~ authorization thereof by a user of the system via a parking meter associated with the parking position;

establishing a start time from which fees may be charged, the establishing of said start time being responsive to the sensing of the presence of said vehicle in said parking position;

establishing a finish time beyond which fees will not be charged, the establishing of said finish time being responsive to a timing termination signal actuated by said user;

calculating fees to be received from said user based on said one or more fee ~~charging~~-rates applicable under said one or more circumstances of use between said start time and said finish time;

using said payment information to effect receipt of a payment from said user based on said calculated fees;

wherein the plurality of fee rates include fee units and time units applicable to successive first and second parking periods, wherein the value of the fee units and the length of the time units are selectively and individually varied between the first and second parking periods so that a fee applied to the second parking period is proportionally greater than a fee applied to the first parking period whereby the fee applied to the second parking period is a self-administered penalty for overstaying the first parking period that is automatically collected when the payment is effected.

34. (Currently Amended) A method of managing a parking resource including a plurality of parking positions, the method including the steps of:

providing one or more parking meters according to claim 28 to monitor ~~utilisation~~ utilization of the parking positions;

providing a connection to each parking meter, through a communications network,
to a control station having processing means;

causing each parking meter to regularly perform self-diagnostic tests and to store
data relating to those tests;

causing each parking meter to store operational data relating to payment
transactions performed by that parking meter;

causing the parking meters to transmit the data relating to the self-diagnostic tests
or the operational data to the control station in real time;

and, at the control station, processing said data in real time for producing one or
more reports based on the processed data.

35. (Currently Amended) A parking management system according to claim 4,
wherein the variable charging rate decreases over the second ~~time~~parking period.